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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,655	06/28/2002	Rudolf Muller	60174-024	6846
7590 08/03/2004				
Gregory D DeGrazia Howard & Howard Attorneys The Pinehurst Office Center Suite 101 39400 Woodward Avenue Bloomfield Hills, MI 48304-5151			EXAMINER COZART, JERMIE E	
			ART UNIT 3726	PAPER NUMBER

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,655

Applicant(s)

MULLER, RUDOLF

Examiner

Jermie Cozart

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20,21,23-28,34 and 35 is/are allowed.
- 6) ☒ Claim(s) 29-33 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 22 is objected to because of the following informalities: In claim 22, line 3, "sheer" is not the correct word because it does not correctly describe the metal, and therefore it is suggested to change "sheer" to - -sheet- -. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 29 and 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller (5,782,594).

Muller`694 discloses an auxiliary joining element (10) and sheet metal work-piece assembly (10, 42), wherein the joining element (10) includes a foot (34) having a generally tubular shape and a central axis (22), comprising an outwardly directed projection (*see fig. 8*) disposed in the sheet metal work-piece (42) formed by depressing the foot (34) of the auxiliary joining element into the sheet metal work-piece, wherein the foot and the outwardly directed projection includes a plurality of undercut regions (41) restricted in a peripheral direction to the foot thereby retaining the auxiliary joining element (10) to the sheet metal work-piece (42) and being spaced by wall sections (not labeled) extending generally parallel to the central axis (22) of the foot. Muller`594 also

discloses the auxiliary joining element including a shaft (*see fig.2, unlabeled portion located reference numeral 34*), an inner thread defining a nut element (*col. 4, lines 18-30*), and the sheet metal work-piece being deformed upwardly into the foot along the central axis (22) of the foot. *See column 3, line 59 – column 6, line 36, and figures 1-8 for further clarification.*

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (5,782,594) in view of Muller (5,528,812).

Muller`594 discloses all of the claimed subject matter except for the sheet metal work-piece comprising two sheet metal pieces.

Muller`812 discloses attaching a fastener to a sheet metal work-piece comprising two sheet metal pieces (58, 80). *See column 5, line 52 – column 8, line 14, and figures 1- 8 for further clarification.*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the sheet metal work-piece of Muller`594 as two sheet metal pieces, in light of the teachings of Muller`812, in order to effectively join two sheet metal pieces together with a fastener.

Allowable Subject Matter

6. Claims 20, 21, 23-28, 34, and 35 are allowed.

7. Claim 22 is objected to for containing a minor informality, but would be allowed pending correction of the minor informality.

8. The following is a statement of reasons for the indication of allowable subject matter: Regarding claim 20, the prior art does not teach or suggest holding the die parts radially inward of the wall the foot of the joining is depressed into the sheet-metal work-piece thereby simultaneously deforming the sheet metal work-piece into the foot and forming spaced undercuts into the foot, in combination with the other claimed limitations; Regarding claim 34, the prior art does not teach or suggest a die having wall sections being movable inwardly thereby forming an undercut in the auxiliary joining element, in combination with the other claimed limitations.

Response to Arguments

9. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited on the attached PTO-892 are cited to show fasteners in an assembled relationship with work-pieces.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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12. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie Cozart whose telephone number is 703-305-0126. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC

July 27, 2004



DAVID P. BRYANT
PRIMARY EXAMINER